M36
#24
2d set

MARYLAND FISHERIES

PUBLISHED BY CONSERVATION DEPARTMENT OF MARYLAND

No. 24 BALTIMORE, MARYLAND September, 1933

CONTENTS

Page

BAY ISLANDS SUFFER GREAT LOSSES FROM STORM 1

AN UNDEVELOPED FISHERY RESOURCE OF CHESAPEAKE BAY—By C. L. NEWCOMBE 6

TEMPORARY CLOSING OF CERTAIN OYSTER AREAS 9

A UNIQUE FISHERY FOR THE STRIPED BASS OR ROCKFISH IN MASSACHUSETTS—By JOHN C. PEARSON 16

FISHING PARTIES 19

EDITORIAL

THE TOLL OF THE STORM 12

BAY ISLANDS SUFFER GREAT LOSSES FROM STORM.

AT THE REQUEST OF Governor Ritchie, Conservation Commissioner Earle visited on August 29th and 31st the islands in the lower Bay to ascertain the damage caused by the storm of August 23rd. It had been reported that the losses in these sections of the State were very severe, and as all communication with the islands had been severed, it was very difficult to learn the real conditions. The following report of the Commissioner to Governor Ritchie covers the investigation:

"*Solomons Island and vicinity.* The easterly end of this island, located in the Patuxent River, Calvert County, is exposed to the winds and sea, and during the recent storm of August 21 to 23, considerable damage was done to the waterfront adjacent to the State's Biological Laboratory. Investigation shows a loss of from 40 to 50 feet of land over a space of 600 feet of waterfront property. A small concrete wall placed in front of the State's Laboratory by the Department held until the surrounding banks collapsed, and this section was the last to go. It is recommended in this section that a seawall be constructed to safeguard this part of the island from future storms.

"In addition to the erosion, many boats were sent ashore or sunk, and the tide was the highest within the memory of the

oldest inhabitants. From investigation and reports from other sections of the State, there is every reason to believe that a tidal wave of two feet, on top of the very high water, caused the most serious destruction. It might be said, however, that Solomons Island suffered less than some of the other islands investigated, which are part of this report.

"*Upper Hooper's Island.* Located in the upper Honga River, between the river and Tar Bay in Dorchester County. The bridge leading to the island, known as Fishing Creek bridge, is entirely gone and transportation is now carried on by scow, carrying two cars at a time. The following crab houses were destroyed: A. E. Phillips and Riley Creighton. Crab and oyster houses damaged beyond operation at the present time: Hubert Applegarth, Major Simmons and H. I. Phillips. Two houses are still in operation on the upper island: S. H. Tolley and Honga Seafood Company.

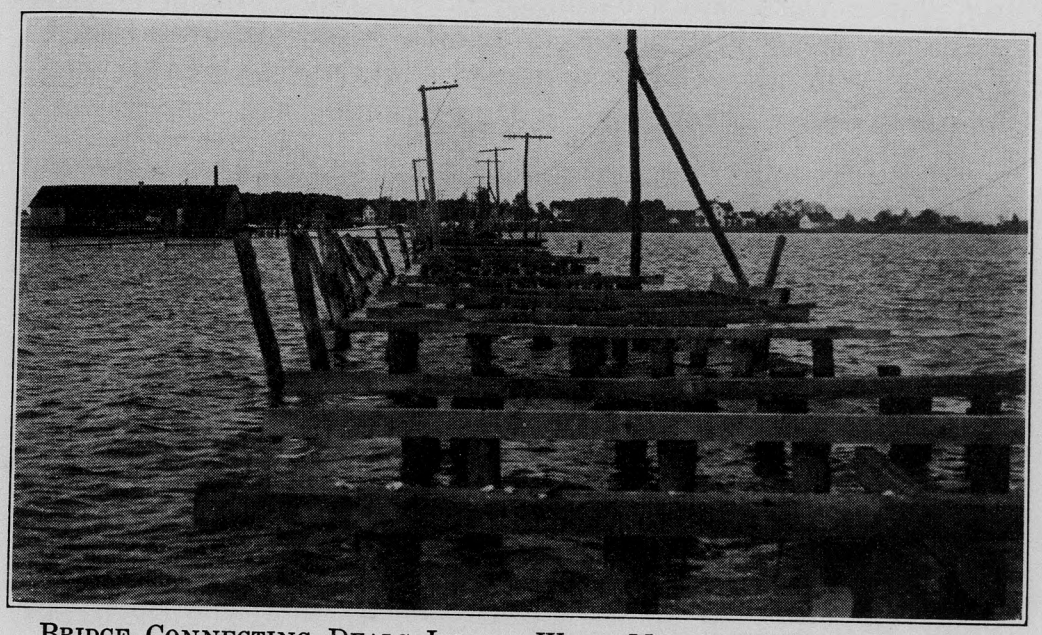
"From 150 to 200 persons have been thrown out of employment as a result of the damage to the crab and oyster houses. A number of boats were destroyed, damaged or dragged ashore.

"A good many dwellings on the island are badly damaged, poultry was drowned, out-buildings and vegetable gardens were demolished, also winter supplies, such as cord wood, was set adrift. It is extremely difficult to estimate the damage. The Red Cross is aiding with food supplies where urgently needed.

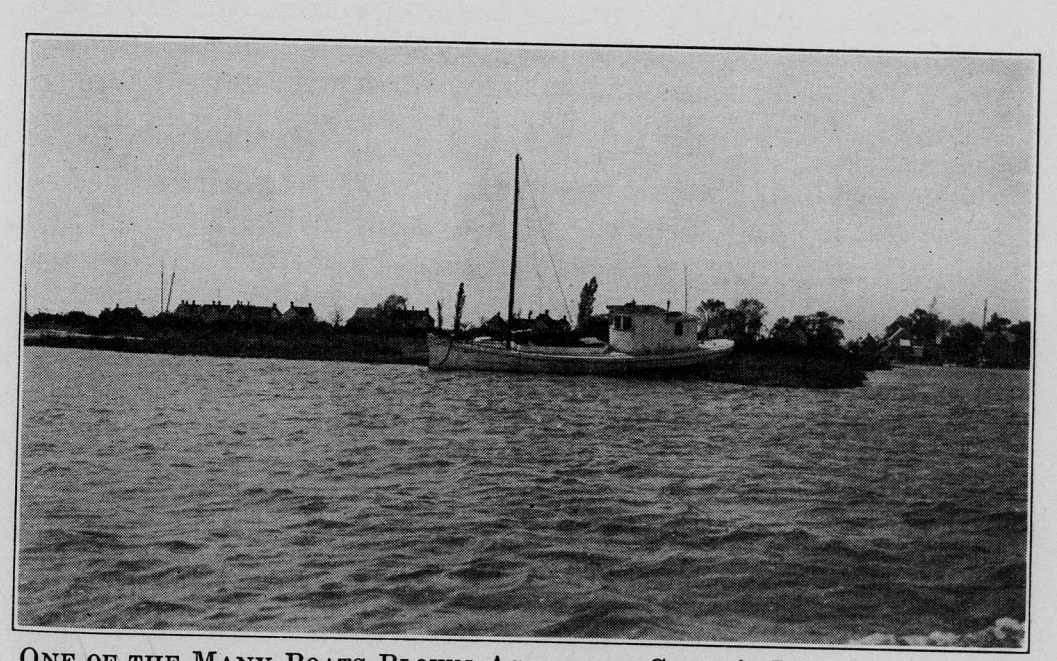
"*Hoopersville, middle Hooper's Island.* Located in Honga River at the entrance to Tar Bay and the Chesapeake, Dorchester County. The storm destroyed the oyster and crab packing house of White & Nelson, located on the wharf off Hoopersville, and partly wrecked the wharf. Mr. White informed me that the crab pickers, some 20 in number, were removed to safety with much difficulty during the storm. The number of persons thrown out of employment will number 100, and Mr. White stated he is working hard to have the plant in operation for crab picking during the balance of the season, so as to give the people employment again.

"A number of boats of all sizes were washed ashore, some destroyed.

"The ferry bridge was carried away, and all supplies must come by boat.



BRIDGE CONNECTING DEALS ISLAND WITH MAINLAND WASHED AWAY



ONE OF THE MANY BOATS BLOWN ASHORE ON SMITH'S ISLAND. ALL CRAB HOUSES DESTROYED

oldest inhabitants. From investigation and reports from other sections of the State, there is every reason to believe that a tidal wave of two feet, on top of the very high water, caused the most serious destruction. It might be said, however, that Solomons Island suffered less than some of the other islands investigated, which are part of this report.

"*Upper Hooper's Island.* Located in the upper Honga River, between the river and Tar Bay in Dorchester County. The bridge leading to the island, known as Fishing Creek bridge, is entirely gone and transportation is now carried on by scow, carrying two cars at a time. The following crab houses were destroyed: A. E. Phillips and Riley Creighton. Crab and oyster houses damaged beyond operation at the present time: Hubert Applegarth, Major Simmons and H. I. Phillips. Two houses are still in operation on the upper island: S. H. Tolley and Honga Seafood Company.

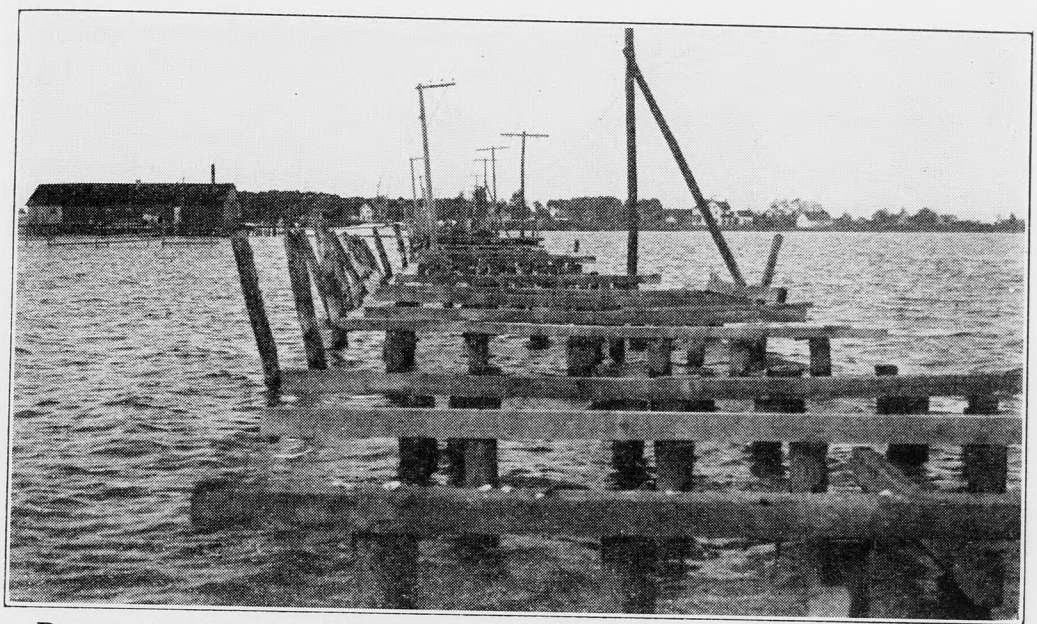
"From 150 to 200 persons have been thrown out of employment as a result of the damage to the crab and oyster houses. A number of boats were destroyed, damaged or dragged ashore.

"A good many dwellings on the island are badly damaged, poultry was drowned, out-buildings and vegetable gardens were demolished, also winter supplies, such as cord wood, was set adrift. It is extremely difficult to estimate the damage. The Red Cross is aiding with food supplies where urgently needed.

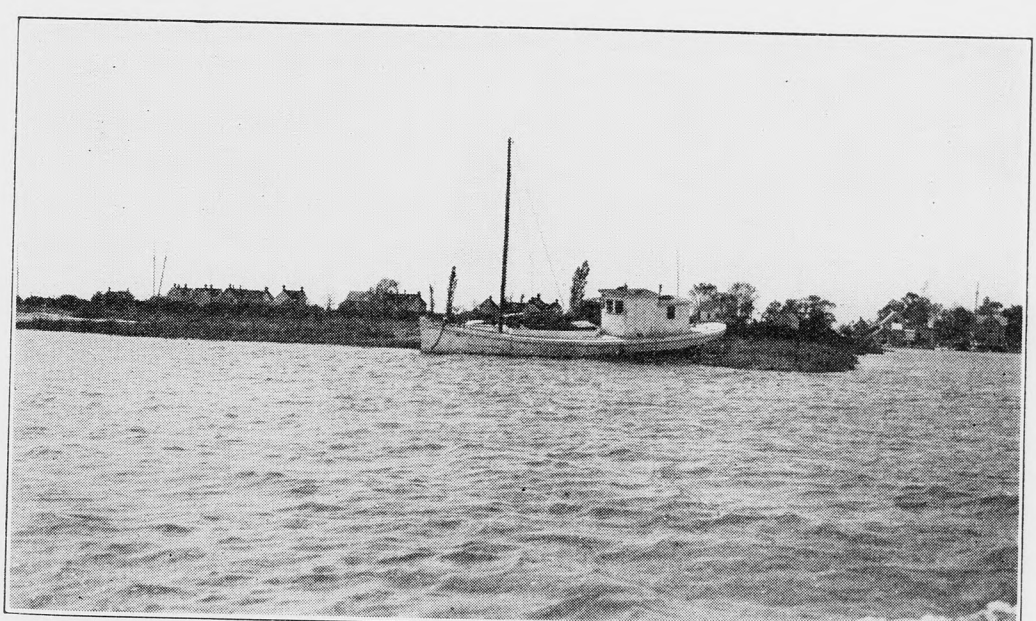
"*Hoopersville, middle Hooper's Island.* Located in Honga River at the entrance to Tar Bay and the Chesapeake, Dorchester County. The storm destroyed the oyster and crab packing house of White & Nelson, located on the wharf off Hoopersville, and partly wrecked the wharf. Mr. White informed me that the crab pickers, some 20 in number, were removed to safety with much difficulty during the storm. The number of persons thrown out of employment will number 100, and Mr. White stated he is working hard to have the plant in operation for crab picking during the balance of the season, so as to give the people employment again.

"A number of boats of all sizes were washed ashore, some destroyed.

"The ferry bridge was carried away, and all supplies must come by boat.



BRIDGE CONNECTING DEALS ISLAND WITH MAINLAND WASHED AWAY



ONE OF THE MANY BOATS BLOWN ASHORE ON SMITH'S ISLAND. ALL CRAB HOUSES DESTROYED

"*Lakes, Hooper's Straits and Wingate.* Located in Fishing Bay and Honga River, Dorchester county. The steamboat wharf was destroyed and the following crab and oyster packing plants were badly damaged or entirely ruined: Charles H. Parks, Dean & Robinson, Meridith & Meridith, and W. C. Dean of Wingates (the last named slightly damaged); W. T. Johnson, Goose Creek, and George Bramble, Crocheron.

"Many boats at Crocheron were sunk or damaged. Several hundred persons were thrown out of work. Vegetable gardens laid waste.

"*Smith's Island, Somerset County.* I was transported from the Steamer DuPont by the local patrol boat to Ewell, the largest town located on the island. There I was met by Captain Wallace Evans and Inspector Middleton, and escorted by these men to various points to see the storm damage.

"Smith's Island was entirely submerged with the exception of two small places, not larger than a half acre. Many of the boats of Ewell and Tylerton, another village, as well as Rhodes Point, were washed ashore, and some of them are on the banks, not yet salvaged. A number went adrift as far up as Honga river, and the watermen are endeavoring to recover their property. The population of the island is between 800 and 900 persons. All their gardens were wiped out, and these are very important to the people, as they depend upon the late potatoes, tomatoes, beans and cabbage for a winter food supply. A detailed report of the loss of boat property is being made.

"The people of Smith's Island are anxious to work and desire to get out of this catastrophe by their own efforts. They stated that if they could scrape for oysters in the Potomac River, they could care for themselves this winter without outside assistance. In talking with several of the storekeepers, I was informed that they would not be in a position to carry the people this winter. The crab season has not been a very successful one on Smith's Island, and it is felt the people will be in need unless they have a good oyster season.

"*Deals Island, Somerset County.* Visited the island and travelled by car to Wenona and the lower end of the island. The damage done by the storm here was very great, and over 40 boats, including large skipjacks, are still in the marsh, some of them entirely useless, others have been salvaged. The most serious condition now confronting the people of the island is the loss of the bridge which connected them with the main-

land. The public schools will start next week, so I was told, and they have to convey about 75 children from Chance, another town, to the school on Deals Island. While the bridge is now being replaced, it is thought that the work will take about two months to complete. The citizens would like to have a scow large enough to take at least two automobiles to and fro. This would aid them very materially.

"The crab and oyster houses were badly battered, and while they are crippled, they will, nevertheless, carry on the crab business the rest of the summer. Crab floats containing peelers were entirely destroyed. Cemeteries were submerged, and many of the vaults were floated away. I saw coffins exposed. Falling trees damaged many houses.

"I found a very fine spirit among the people of this island and Smith's Island as well. They prefer to help themselves as much as possible, but they were also very anxious for any public works contemplated for their region to be begun as soon as possible, and I am sure it would do the greatest good at this time to have any such work pushed rapidly.

"*Crisfield, Somerset County.* This most important seafood town of the Chesapeake suffered a great loss in crab houses and floats, as well as some 50 or more skipjacks and other types of boats, which were cast up on the marsh by the storm.

"In Pocomoke Sound seven crab houses in the neighborhood of Apes Hole Creek were blown away and tremendous damage done to crab floats. Every boat in the section was either carried ashore or sunk. A report from the local deputy commander stated, 'In all of the creeks and Pocomoke River all of the fish are seemingly killed. The banks of Marumsco Creek, which is 12 miles long, are lined with dead fish, muskrat, turtles and every other thing that abounds in this stream. One man reported he found ten beautiful perch on one water-bush.'

"It is somewhat difficult to estimate the actual loss in dollars and cents. One packer, John T. Handy, stated it would run more than $100,000. In a conversation with the Mayor, W. H. Bradshaw, it was his opinion that Crisfield did not fare as badly as some other places, aside from the boats and crab houses. He believes that their people will be able to get along all right, provided certain public improvements now under consideration are carried out. This includes the proposed sewerage system for the town.

"It is miraculous that more lives were not lost, and the way it was accounted for at Smith's Island was due to the fact that the storm was so severe in the early morning that crabbers and crab pickers were unable to reach their places of work and thus remained at home. While I do not believe at this time there is any suffering from lack of food or shelter, with the coming of winter, which they face without their customary food supplies from the gardens, and an uncertain oyster season, I am afraid there will be some distress among these people.

"In conclusion, I might say that my observations along the islands and shore line of the lower Bay show an alarming amount of erosion to have occurred as a result of this storm. In places it averaged from 40 to 50 feet, and it may be conservatively stated that the loss along Maryland's 3,000 miles of waterfront would average about five feet, or approximately 1,200 acres.

"At this time I am not in a position to state what effect it will have on the oyster bars of the State, but we anticipate that the shoal water oyster bars in the tributaries will suffer from the vast quantities of mud and silt that were washed down by the storm. The volume of fresh water coming down from the Susquehanna and the head of the Bay would likely affect the seed oyster rocks below Poole's Island. Fortunately, the Department moved 65,000 bushels of this seed to safe oyster bars last spring.

"I trust the commission you appointed to study erosion in the Bay region will give due consideration to many points marking the entrance to harbors, as well as to certain river banks adjacent to the State's oyster bottoms."

AN UNDEVELOPED FISHERY RESOURCE OF CHESAPEAKE BAY

By C. L. NEWCOMBE, *Chesapeake Biological Laboratory*

THE SOFT-SHELLED CLAM (*Mya arenaria*), known locally as the *mananose*, the *butter fish*, or the *long clam*, constitutes a latent fishery resource possessing possibilities for development thruout practically the entire extent of the Chesapeake Bay.

The use of this attractive bivalve is, next to the oyster (*Ostrea virginica*), probably the most extensive of any shellfish

on the entire Atlantic coast. In California the number marketed is exceeded only by the Prismo clam (*Tivela stultorum*), and it is doubtless destined in time to surpass the latter. On the Atlantic coast it ranges from the Gulf of St. Lawrence south to the Carolinas and is the principal clam in the markets north of New York.

The *mananose* is to be considered as one of the very best sea foods available. The high esteem with which it is regarded as a table delicacy, served in a great variety of ways, places it amongst the most desirable products for handling in quantities during all seasons of the year. Then, too, procuring clams does not offer the uncertainty that attends most fisheries, for they may be dug from the shallow waters at the time and in the quantity demanded by the market.

The watermen, as well as the casual observer, cannot fail to be attracted by the presence of numerous holes in the surface layer of the beach soil at low water. These holes may signify the presence of clams which are living at a depth of approximately eight inches, depending on the size, and communicating with the outside thru the surface-hole reached by two long tubes or siphons attached together. When the beach is submerged, water containing the food of the species in the form of microscopic animals and plants, enters thru one siphon, traverses the gills, leaving its contained life to be passed into the alimentary tract of the clam, and is finally expelled to the outside thru the other siphon. Thus, other factors being equal, the longer clams are covered by the tide, the greater their feeding period and hence the more rapid is their rate of growth. Consequently, the larger specimens are found in the deeper waters at the low levels of the beach.

At the end of the first ten or twelve days of its existence the free swimming embryo clam fastens itself to various objects such as sand grains, shells, rocks, and sea weeds of various kinds by means of a horny thread which it loses at an early date. After it has reached a length of about one inch, it rarely moves about and so is left to the exigencies of that particular environment where it has set.

Residents of the Chesapeake region state that the *mananose* was at one time very abundant along the Chesapeake shores. During recent years (1931 and 1932) a marked scarcity has been noted. Observations in the vicinity of Solomon's Island, made during July of 1933, seem to indicate a likely return in the near future of marketable *mananose*. This statement is

based on our finding considerable numbers of small specimens (under one year of age) during the course of investigations at the laboratory. The desirability of extending these records and following closely the trend of development thruout the coming seasons is apparent. At present, experiments are in progress which aim to show the rate of growth and spawning habits of this form, facts that are prerequisite to the cultivation of the fishery.

There is in the case of some of our fishery resources a difficulty in placing the product on the market in a fresh condition. In the case of the clam, we have a form naturally adapted for handling in the living condition. It can be readily obtained from the beaches, shipped hundreds of miles inland, and placed on the market in a live state.

There are on the Chesapeake shores hundreds of acres of clam flats capable of being utilized in the cultivation of this fishery. This fact, together with the hardiness of the species, its adaptability to a wide range of conditions, the low cost involved in placing it in the live condition on the markets of our larger mid-Atlantic cities, and its high quality as an attractive and valuable food should stimulate a prosecution of the fishery far in excess of that of the present time. In other places where the clam is abundant, such as Maine, Massachusetts, New York and California, clams are prepared for the table in a variety of appetizing ways. The chowders and soups prepared from this species are justly famous.

The *mananose* is not only shipped in the live condition, but also in cans, and this canning industry developed from the early part of the century to a point where nearly three-quarters of the clams were handled in this way. Recent changes in the United States tariff have almost closed our markets to Canadian clams, a measure which may benefit our local fishery, providing proper advantage is taken of it.

Those who are so fortunate as to pass some time on the New England seacoast know the pleasures of a "clam bake'" on the beach (the clams are really steamed in sea weed) and of a finely made "clam chowder." Most people know nothing of these, and a definite and prolonged effort should be made to enlighten them as to the desirability of the clam. It would give them new variety in their diet, and, like other sea foods, it would provide elements important for the human body, not infrequently lacking, and furthermore, it is available at all times of the year.

TEMPORARY CLOSING OF CERTAIN OYSTER AREAS.

REPORTS received by the Department from various sources throughout the month of August indicated that large quantities of small oysters were to be found in almost every oyster-growing section of the State. In view of the fact that such small oysters would in almost every case gain in size and value if left on the bottoms for the period of one or two months, coupled with the fact that the months of September and October are usually dull ones for the oyster business, and most important of all, on account of requests by the oystermen themselves, the Department decided to close the following areas to oystering:

	Acres
Poplar Island Narrows—Oyster bars known as Big Oyster Bar and Shell Hill Bar, Talbot County (Closed September 11 to October 31, 1933.)	400
Gibson's Flats—Oyster Rock, Miles river, Talbot County (Closed September 11 to October 31, 1933.)	40
Bachelor's Point and Mare's Point Bars, 20 acres each—Tred Avon river, Talbot County (Closed September 11 to October 31, 1933.)	40
Great Bar—Broad Creek, Talbot County (Closed September 11 to October 31, 1933.)	100
Fishing Bay—About 1,200 yards from entrance to Goose creek, thence following mean low water mark in northerly direction to a point about 1,000 yards above Roasting Ear Point; thence across Fishing Bay in N. E. direction to point on Elliott's Island; thence running southerly to U. S. Triang. Station "Ear," and across Fishing Bay to point of beginning, Talbot County (October 1st to 31st, 1933, closed.)	2000
Marumsco Oyster Bar—523 acres, **Gunby Oyster Bar**, 236 acres, Pocomoke Sound, Somerset County (September 15 to 30, 1933, closed.)	759
Evans Shoal Bar—Tangier Sound, off entrance to Rock creek, Somerset County (Closed September 15 to October 31, 1933.)	25
Oldfield Oyster Rock—Chester river, near mouth of Corsica, Queen Anne's County (Closed September 1 to October 31, 1933.)	50
Hood's Point Oyster Bar—Prospect Bay, Queen Anne's County (Closed September 1 to October 31, 1933.)	570
Crab Alley Lump Bar and Norman's Fine Eyes Bar—Queen Anne's County (Closed September 1 to October 31, 1933.)	744
Jones Hole Oyster Bar—Cox creek, Queen Anne's County (Closed September 1 to October 31, 1933.)	72
Tolly's Point Oyster Bar—Southeasterly of entrance to Severn river, in Chesapeake Bay (Closed September 1 to October 31, 1933.)	200

In addition to the above areas, the Department also ordered closed during September and October, so as to protect the oysters transferred from the restricted zone in the neighborhood of Cambridge, during the month of June:

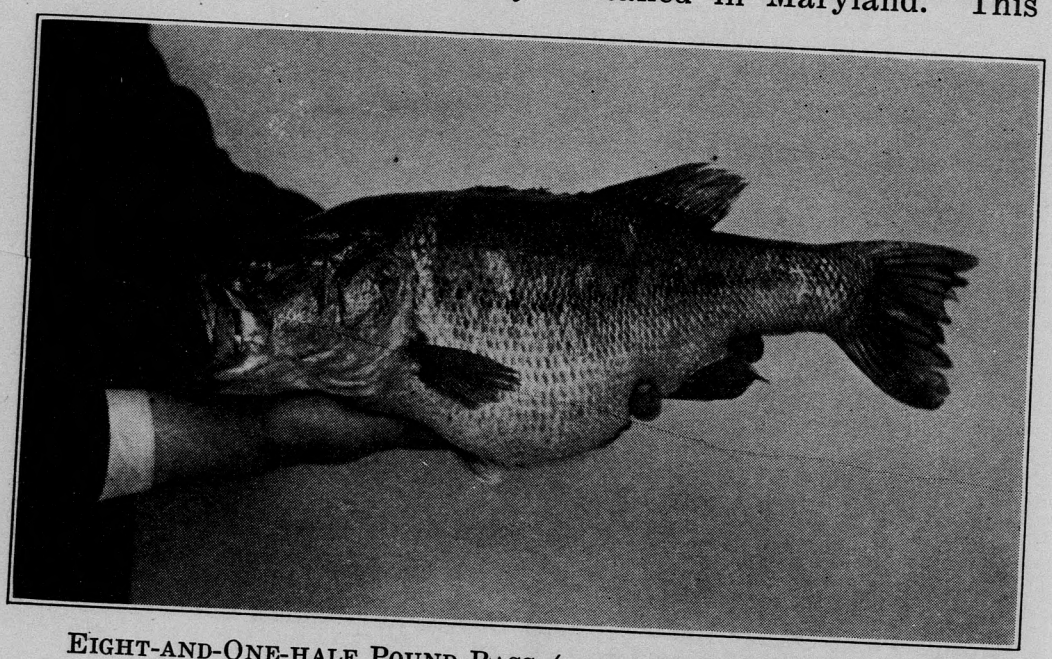
Scraping Line Addition Oyster Bar—Abreast of Cambridge and at the westerly entrance to Bolingsbroke creek, Dorchester County 30

Suitable advertisements were inserted in the county newspapers of the respective counties in which these areas are located, and the "Daily Record" of Baltimore City.

The total closed areas, 5,030 acres.

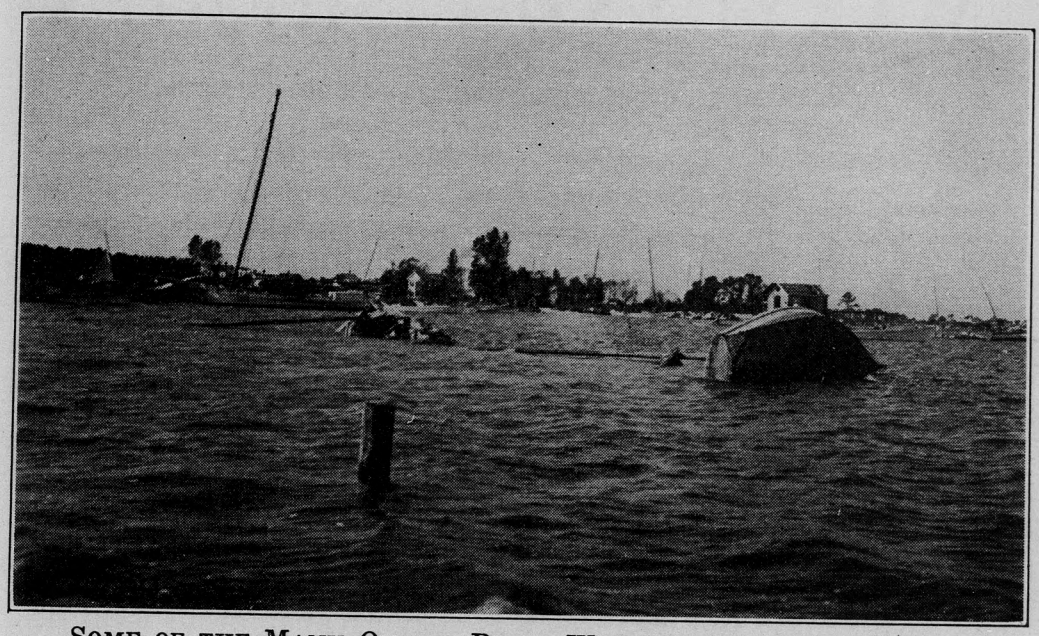
HAGERSTOWN BANS SALE OF BLACK BASS

Word has been received that the Mayor and City Council of Hagerstown recently passed an ordinance prohibiting the sale of black bass in that city. A similar ordinance has already been passed for Baltimore, and with the State's metropolis and third largest city closing their markets to this fish, the traffic in black bass will be largely curtailed in Maryland. This

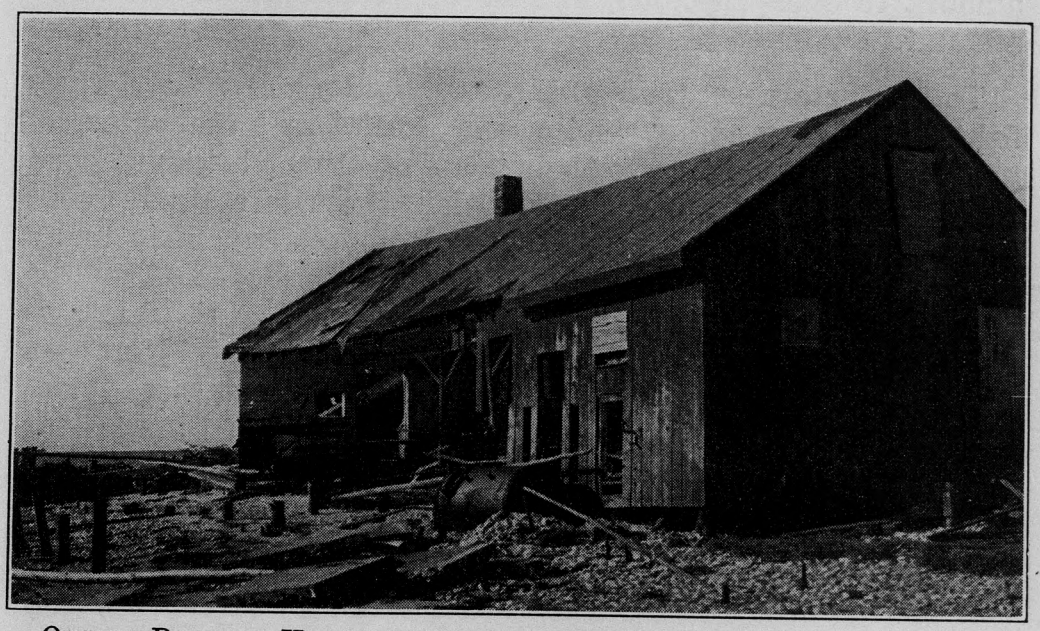


EIGHT-AND-ONE-HALF POUND BASS (LARGE MOUTH) CAUGHT NEAR WILLIAMSPORT, WASHINGTON COUNTY

action, which will probably be followed by the passage of similar ordinances in other sections of the State, has somewhat mitigated the disappointment caused by the failure of the 1933 Legislature to pass a State-wide measure banning the sale of this great game fish.



SOME OF THE MANY OYSTER BOATS WRECKED OFF DEALS ISLAND



OYSTER PACKING HOUSE AT WENONA, DEALS ISLAND, BADLY DAMAGED BY AUGUST STORM

In addition to the above areas, the Department also ordered closed during September and October, so as to protect the oysters transferred from the restricted zone in the neighborhood of Cambridge, during the month of June:

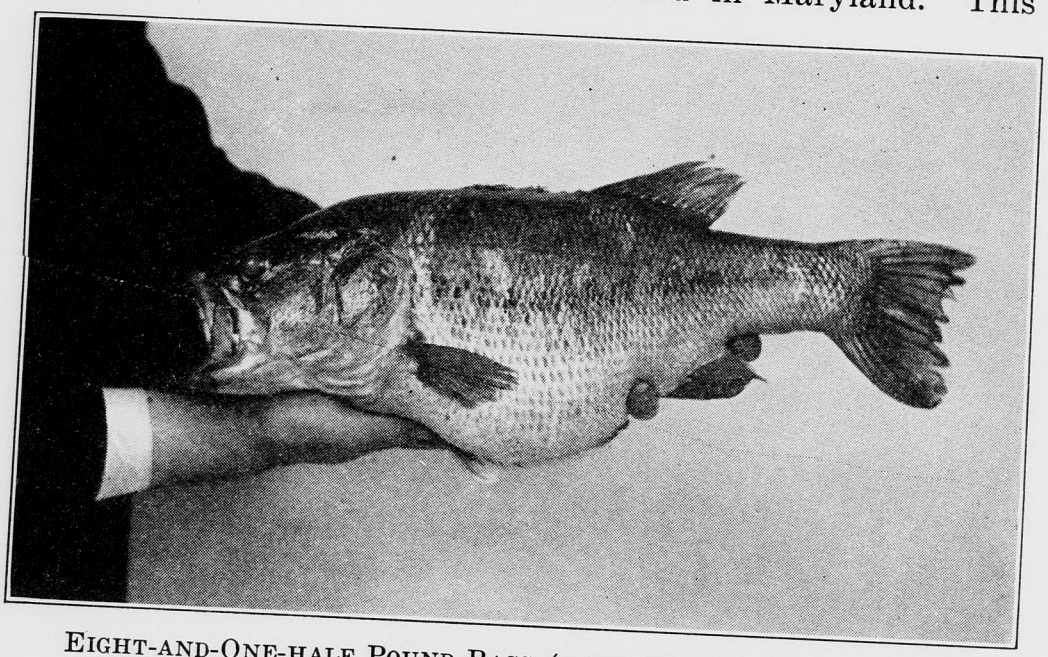
Scraping Line Addition Oyster Bar—Abreast of Cambridge and at the westerly entrance to Bolingsbroke creek, Dorchester County 30

Suitable advertisements were inserted in the county newspapers of the respective counties in which these areas are located, and the "Daily Record" of Baltimore City.

The total closed areas, 5,030 acres.

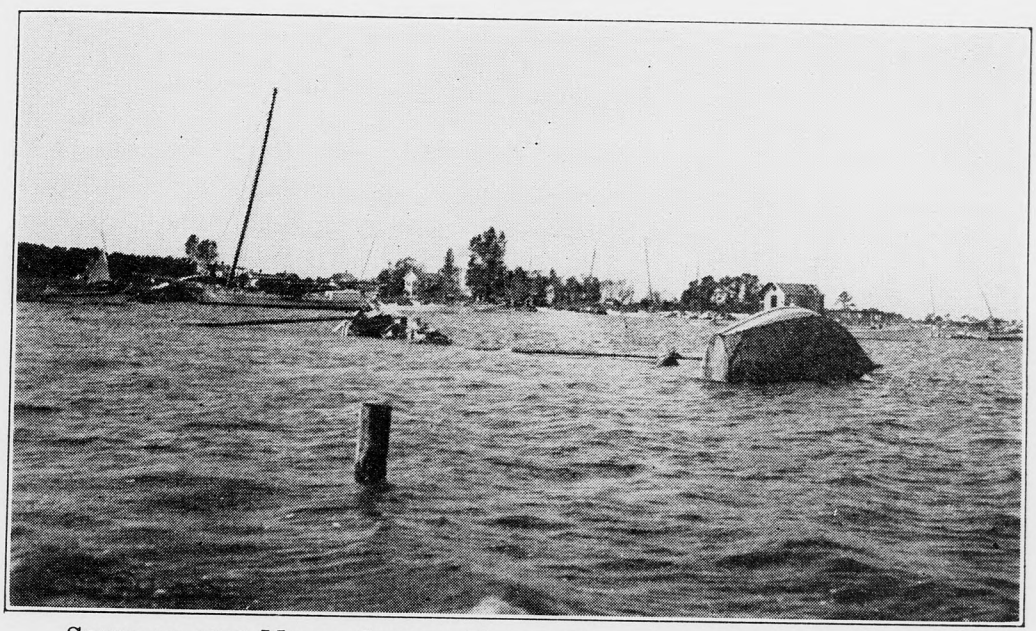
HAGERSTOWN BANS SALE OF BLACK BASS

Word has been received that the Mayor and City Council of Hagerstown recently passed an ordinance prohibiting the sale of black bass in that city. A similar ordinance has already been passed for Baltimore, and with the State's metropolis and third largest city closing their markets to this fish, the traffic in black bass will be largely curtailed in Maryland. This

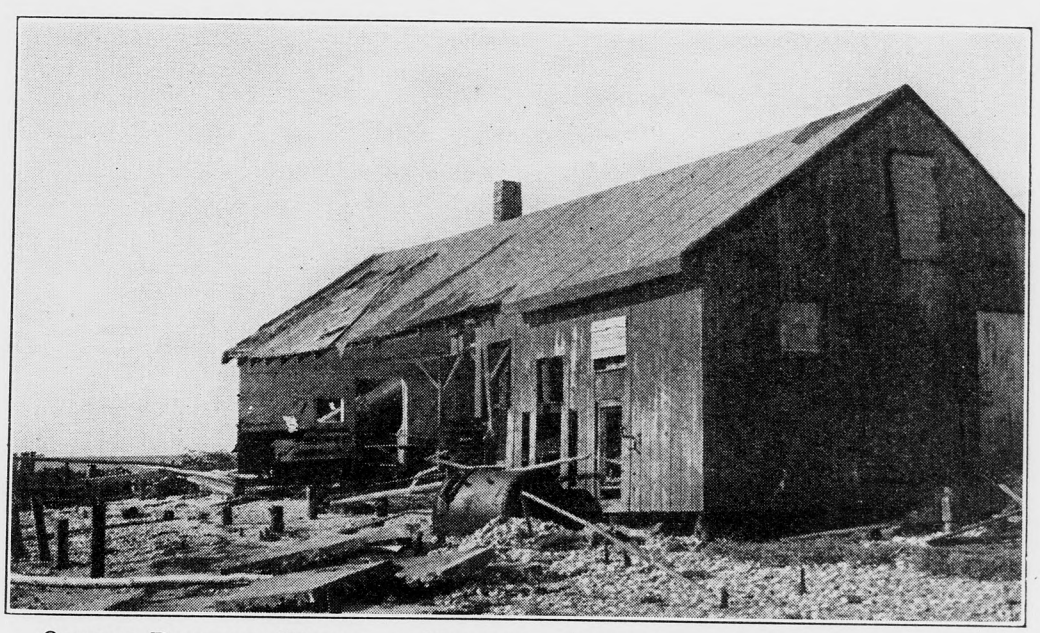


EIGHT-AND-ONE-HALF POUND BASS (LARGE MOUTH) CAUGHT NEAR WILLIAMSPORT, WASHINGTON COUNTY

action, which will probably be followed by the passage of similar ordinances in other sections of the State, has somewhat mitigated the disappointment caused by the failure of the 1933 Legislature to pass a State-wide measure banning the sale of this great game fish.



SOME OF THE MANY OYSTER BOATS WRECKED OFF DEALS ISLAND



OYSTER PACKING HOUSE AT WENONA, DEALS ISLAND, BADLY DAMAGED BY AUGUST STORM

MARYLAND FISHERIES

PUBLISHED BIMONTHLY BY CONSERVATION DEPARTMENT,
SWEPSON EARLE, Commissioner.

No. 24 BALTIMORE, MARYLAND September, 1933

THE TOLL OF THE STORM

FOLLOWING the investigation of certain islands in the lower Chesapeake Bay in Maryland waters, made at the direction of Governor Ritchie to ascertain the damage done by the storm of August 23rd, Commissioner Swepson Earle has received a number of reports supplementing this investigation, which show that the destruction of boat property and oyster and crab houses and wharves was very great in other localities of the State. Up to this time it is impossible to assess the extent of the damage, but it will certainly run very high, as one packer in Crisfield estimated the loss in that town alone would amount to over $100,000, and at Tilghmans about the same amount.

To the watermen, that is, those who gain a livelihood from fishing, crabbing and oystering, the storm was a real catastrophe, due to the damage to their boats upon which they depend for their very existence. In addition, the sale of their crabs and oysters depend upon the packing houses, which in many cases were seriously damaged or wholly wrecked, and will be out of operation until they can be repaired. The third loss to the watermen was due to the total destruction of their garden patches, which were well supplied with late potatoes, tomatoes, beans and other crops to be canned by their families for winter use. This is particularly lamented by the islanders who depend upon this food supply very greatly.

The small toll of life taken by the storm is almost miraculous in view of the tremendous tide that swept these islands of the Bay and the damage to shore-front property. There is no question but that the destruction was caused by a tidal wave which came when the tide was at its height and swept in for an additional depth of two feet. This great tide was whipped into the shores by a 55-mile gale, and it is the opinion of the people of

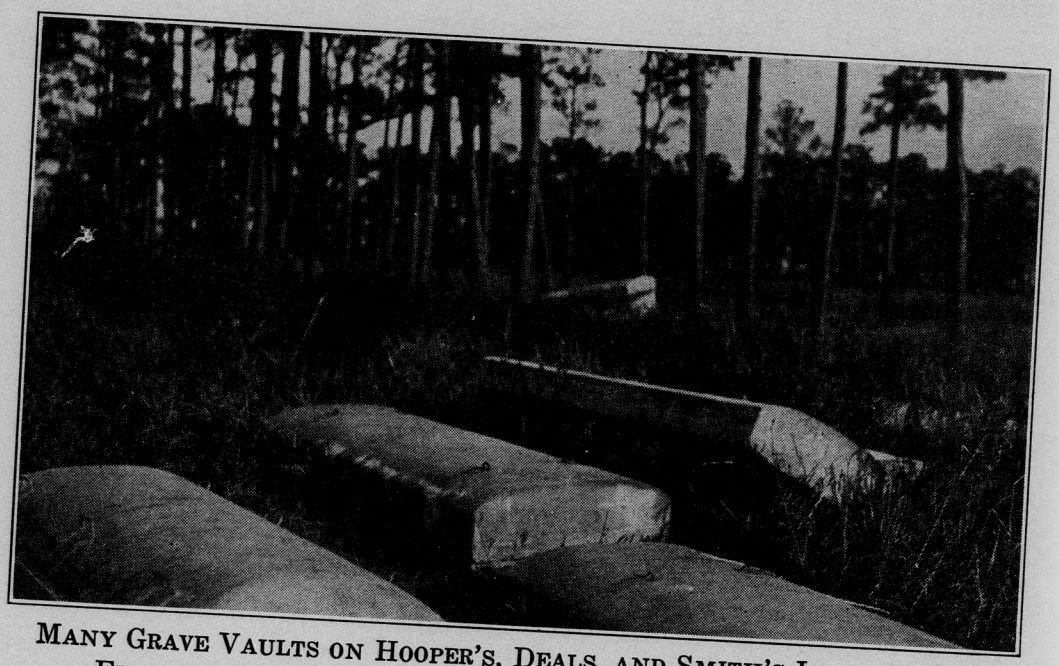
Smith's and Deals Islands that had the tide continued to rise another hour their houses would all have been swept away. On Smith's Island the people were marooned ten miles from the nearest point of communication, and the entire island was under water with the exception of two spots of less than half an acre each.

Around Maryland's 3,000 miles of waterfront there was considerable damage from erosion caused by the high tide. In some places 40 to 50 feet of shore were washed away, and it is estimated that the average wash was five feet over this area. At Solomon's Island, in front of the State's Biological Laboratory, there is a wash of 40 feet, and this wash extends for a distance of 600 feet. The State road leading to the wharf at Solomon's Island was washed out, as well as the wharf itself, which was destroyed, and many boats carried ashore. The State boats at this point were all saved. Molly's Leg Island, memorable for the fact that many bodies of dredgers, washed ashore in the old days when shanghaiing was practiced on the Bay, were buried there, is scarcely more than a memory. The recent storm reduced this little island to about an acre, and the erosion of a few more years will wipe it out.

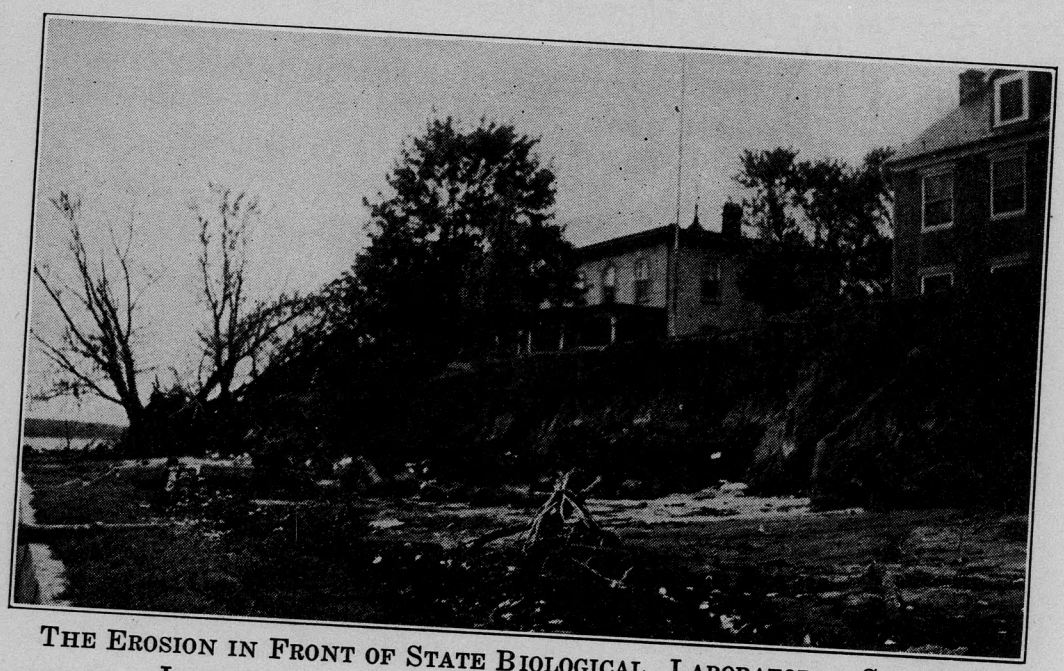
The fine spirit with which the watermen generally have met this disaster is worthy of recognition. The people immediately set to work to rebuild their homes and boats, and they feel everywhere that if the coming oyster season is a successful one they will be able to manage without outside assistance. If it is not, many of them undoubtedly will be in desperate want.

SOME INTERESTING ASPECTS OF THE AUGUST STORM

At Hoopersville, on Middle Hooper's Island, two boats were blown ashore and driven entirely through a church, coming out on the other side. The people of this community are usually buried in vaults above ground, due to the low elevation of the island, and many of these vaults were washed out by the high tide and carried to great distances. In one case a vault was broken open, the coffin turned out, and the vault settled back in its original location. In a colored burial ground on Deal's Island 14 vaults were washed out and many coffins exposed. A truck containing a number of colored persons struck one of these vaults on the evening of the storm, and it is stated that the occupants of the machine fled, abandoning the car, when they discovered what had been hit.



MANY GRAVE VAULTS ON HOOPER'S, DEALS, AND SMITH'S ISLANDS WERE FLOATED OUT BY THE TIDE AND BROKEN OPEN OR DAMAGED



THE EROSION IN FRONT OF STATE BIOLOGICAL LABORATORY, SOLOMONS ISLAND. BANKS WASHED AWAY FROM 5 TO 50 FEET

Over in Worcester County a wild cow from one of the small islands was found swimming about and nearly exhausted. She was caught by the horns in a crab net and pulled ashore. Famished for water the terrified animal gulped two or three buckets of fresh water, then kicked the bucket to pieces and dashed wildly away. It is said that wild cattle rescued from quicksand will, in every case, attack their rescuers before running off. In this locality it was also reported that all the wild ponies on Chincoteague Island were drowned with the exception of three animals. This report was later found to be exaggerated. All but three in one herd were lost, but the herd on Assateague Island is intact.

TROUT STOCKING

Ellicott City, Md., August 15, 1933.

MR. SWEPSON EARLE,
Conservation Commissioner,
Baltimore, Md.

DEAR MR. EARLE:

The trout season and the inspiration of this letter are long past. I think, however, a kind word should not be left unsaid merely because it is tardy.

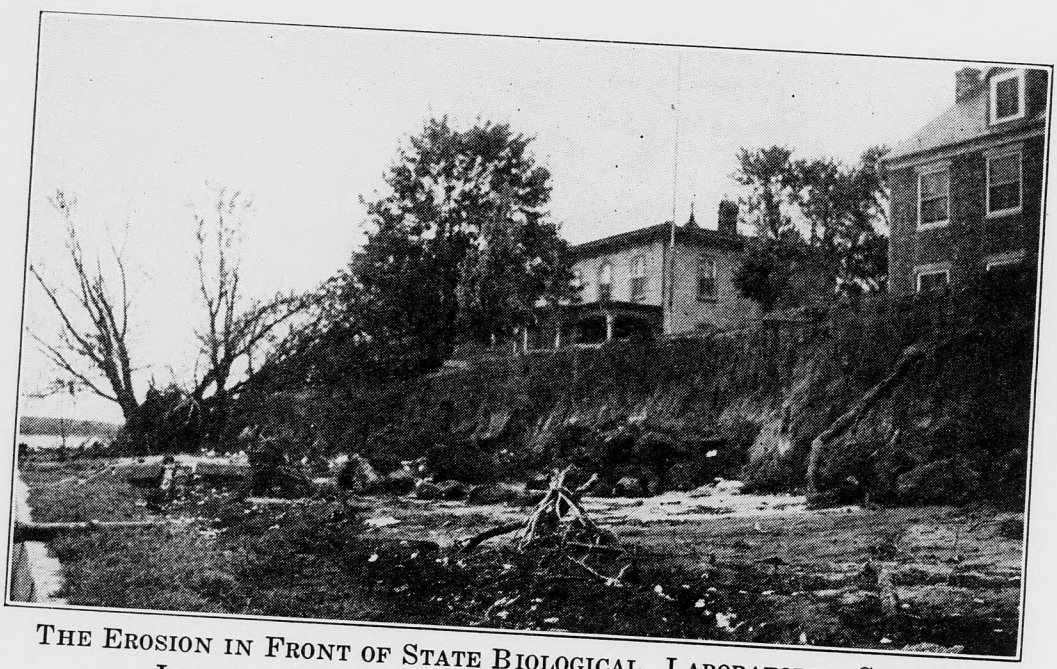
As one is more likely to be urged to action by a desire to complain than by the desire to compliment, I expect your mail shows a preponderance of kicks.

I, however, want to express my appreciation of the good, and probably hard work being done by your department in stocking our streams, with particular reference to trout, as I seldom fish for bass.

While the past season, based on creel count, was not particularly satisfactory, it was nevertheless, from the standpoint of enjoyment and physical well-being, eminently successful. Even so late as a few days before the close of the season, I got into Hunting Creek for the only time this year and then only for about two hours, but creeled two fine rainbows.

Mr. Powell's courtesy, interest and patience in studying local stream conditions in order that our plantings might be most effective is especially appreciated. Any one who has had

MANY GRAVE VAULTS ON HOOPER'S, DEALS, AND SMITH'S ISLANDS WERE FLOATED OUT BY THE TIDE AND BROKEN OPEN OR DAMAGED



THE EROSION IN FRONT OF STATE BIOLOGICAL LABORATORY, SOLOMONS ISLAND. BANKS WASHED AWAY FROM 5 TO 50 FEET

Over in Worcester County a wild cow from one of the small islands was found swimming about and nearly exhausted. She was caught by the horns in a crab net and pulled ashore. Famished for water the terrified animal gulped two or three buckets of fresh water, then kicked the bucket to pieces and dashed wildly away. It is said that wild cattle rescued from quicksand will, in every case, attack their rescuers before running off. In this locality it was also reported that all the wild ponies on Chincoteague Island were drowned with the exception of three animals. This report was later found to be exaggerated. All but three in one herd were lost, but the herd on Assateague Island is intact.

TROUT STOCKING

Ellicott City, Md., August 15, 1933.

MR. SWEPSON EARLE,
Conservation Commissioner,
Baltimore, Md.

DEAR MR. EARLE:

The trout season and the inspiration of this letter are long past. I think, however, a kind word should not be left unsaid merely because it is tardy.

As one is more likely to be urged to action by a desire to complain than by the desire to compliment, I expect your mail shows a preponderance of kicks.

I, however, want to express my appreciation of the good, and probably hard work being done by your department in stocking our streams, with particular reference to trout, as I seldom fish for bass.

While the past season, based on creel count, was not particularly satisfactory, it was nevertheless, from the standpoint of enjoyment and physical well-being, eminently successful. Even so late as a few days before the close of the season, I got into Hunting Creek for the only time this year and then only for about two hours, but creeled two fine rainbows.

Mr. Powell's courtesy, interest and patience in studying local stream conditions in order that our plantings might be most effective is especially appreciated. Any one who has had

the great opportunity to fish for trout in their proper waters will readily realize the difficulty of his problem.

After several years of careful observation and fishing in Baltimore, Howard and Frederick Counties, and some planting in Howard County, I am fully satisfied that Mr. Powell, with your department back of him, is giving us just about all we can expect to get out of the available waters. That our catches are sometimes no larger, is in my own case at least, chargeable to our failure to ask for replanting. The Patuxent this year furnished many small, but few large, catches.

Again, in closing, I want to express my appreciation of the fine sport we are getting from very poor natural resources.

Sincerely,

W. N. GAMBRILL.

A UNIQUE FISHERY FOR THE STRIPED BASS OR ROCKFISH IN MASSACHUSETTS.

By JOHN C. PEARSON, *Assistant Biologist,*
U. S. Bureau of Fisheries.

THE WRITER had an opportunity last March through the invitation of Mr. Copley Amory, of Washington, D. C., and the Massachusetts Fish and Game Commission to visit the site of an interesting local fishery for the striped bass or rockfish in Parker River, Mass. Inasmuch as no written account of this fishery exists to the writer's knowledge, and that it is the only fishery of its type in existence, the following description may be of interest to the people of Maryland who know the striped bass or rockfish much better than do the people of Massachusetts.

The striped bass have virtually disappeared from those New England rivers emptying into the ocean north of Cape Cod, but due to long-standing restrictions on net fishing in Parker River the species still exists in small commercial quantities in that river. The Parker River is a narrow, winding tidal stream which flows into the Atlantic Ocean a few miles south of Newburyport, Mass. The river averages about 50 feet wide, runs largely through low salt marshes and is supplied

at its headwaters by small brooks. Smelt, herring, and lamprey eels use the river extensively in their spawning migrations from sea into fresh water, and history records the presence of Atlantic salmon in the river many years ago. Although many small dams now obstruct these brooks, the State of Massachusetts has long maintained a series of fish-ways, which apparently operate successfully for the smaller anadromous fishes.

For over 100 years local farmers and occasional fishermen have practiced a most distinctive fishery for the striped bass in Parker River. This fishery consists essentially of the operation of a large dipnet thrust through a hole in the ice down to the edges of certain "holes" or depressions in the river bed to await the striped bass which drift back and forth with the tide in and out of the "holes."

The net itself consists of a stout wooden pole about 20 feet long, at one end of which is fastened an iron or wooden hoop 8 feet in diameter. A 3½ inch stretched mesh net is fastened to the hoop and is made to hang about 18 feet deep.

All commercial fishing by law is limited from December 1 to April 1, but is more strictly limited by nature itself, for fishing operations can only be conducted when the river is frozen over with several or more inches of ice. No gill nets or other forms of fishing gear are permitted. A large hole is chopped in the ice and the hoop and net are lowered to the bottom. The current keeps the net webbing stretched out to form a pocket and the edges of the ice-hole help to keep the pole upright. A man must constantly keep his hand on the pole to detect the entrance of fish into the net. Striped bass entering the pocket usually strike against the webbing thus sending a vibration up the pole. The fisherman, upon feeling fish inside the net, quickly pushes the wooden pole from a nearly vertical to a semi-horizontal position, thus elevating the hoop and causing the fish to fall back into the deep pocket of the net. Gradually removing the pole in a semi-horizontal position out of the water, the attached hoop and net are brought out of the water through the ice-hole and the catch dumped on the ice. As many as 30 to 40 striped bass, weighing from 10 to 20 pounds apiece, have been taken at one time.

The success of this fishery requires solid ice over the narrow river and a knowledge of definite holes or depressions in the river bottom through which the striped bass are known to drift sluggishly back and forth with the varying tides. The

opening of the net must be so placed as to receive these drifting fish that enter tail foremost into the 18-foot pocket. Exceedingly heavy ice, combined with a low tide, is considered best, for then the fish are literally "squeezed" out of the shallow parts of the river into the deeper channel. The fishermen must have the fortitude to stand by the hole for hours at a time in bitter cold and be ready to raise the hoop immediately on obtaining an indication of fish within the net. Fishing may be practiced night and day and on either flood or ebb tide. Since the water in the river is salty and subject to strong tidal action, no suitable ice may be formed during a mild winter, and the fishery must wait for another colder winter.

This fishery probably dates back to early colonial days, and, although of minor importance in the extensive coastal fisheries of Massachusetts, is one, through strict regulation of a limited natural resource, that has endured through several or more generations.

STORM CUTS INLETS AT OCEAN CITY

One of the results of the August storm, which did such great damage in tidewater Maryland, was the cutting of three inlets through Sinepuxent Beach, below Ocean City. One of these inlets will probably remain open for sometime, since it is several hundred feet in width. Captain W. T. Scott, in charge of the police boat of Sinepuxent Bay, reports that excellent catches of trout and crabs have been made since the opening of the inlet, as many as five and six barrels of crabs a day being caught by the watermen.

Plans for the jetties, which the War Department proposes to establish for the purpose of maintaining a permanent inlet through Sinepuxent Beach, in order to provide ingress and egress from the bays to the ocean, have been approved, and the work will go forward under Colonel E. J. Dent, District Engineer at Baltimore, in the near future.

FISHING PARTIES

As a result of a survey made in August last year by the Conservation Department, through its deputies stationed in the various sections of tidewater Maryland, some extremely interesting figures were obtained on the number of sport fishermen resorting to the Chesapeake Bay and its tributaries during the period of a week. These figures, gathered from only the principal fishing resorts of the Bay, revealed the fact that 9,735 persons engaged in this sport in Maryland during the week of August 21st to 28th, 1932. It was estimated that the presence of these anglers brought into the State approximately $100,000, from the item of boat-hire paid to Maryland watermen who take out fishing parties, and sums spent at local boarding houses in the vicinity of the fishing resorts. In the figures obtained last year privately owned boats were included.

A similar survey has been made by the Department's officials in tidewater this summer, taking the week of August 1st to 7th, which ordinarily represents the height of the fishing season. The following tabulation by places, and including *only* the boats of persons who make a business of taking out fishing parties, shows a material increase over last year. Chesapeake Bay's reputation as a fishing ground grows apace.

LIST OF FISHING PARTIES FROM AUGUST 1st TO 7th, 1933

	No. of Trips	No. of Men Employed	No. of Persons Fishing
Anne Arundel County			
Churchton, Deale and Seaside Park	32	32	742
Shadyside	140	140	980
West Shadyside	20	20	140
Edgewater Beach	8	8	56
Galesville	55	55	405
Mayo	15	15	105
Annapolis	26	26	193
Eastport	17	17	188
Cypress Creek	4	4	19
(Charge, $1.00 per head per day.)	317	317	2,828
Calvert County			
Broome's Island	21	21	117
Solomon's Island	398	398	2,388
(Charge, $1.00 per person per trip.)	419	419	2,505
Charles County			
Rock Point and Neals Creek, St. Mary's and River Springs	140	140	589
Rock Point	16	16	52
Benedict	29	29	145
(Charge, $1.00 per person per trip.)	185	185	786

	No. of Trips	No. of Men Employed	No. of Persons Fishing
Dorchester County			
Taylor's Island and Hill Point	13	13	45
Bishop's Head	1	1	3
Vienna	1	1	8
Sandy Hill	5	5	20
Upper Hooper's Island, Fish. Creek and Honga	10	14	97
Middle Hooper's Island	5	5	25
Secretary, Cambridge, etc.	69	69	204
(Charge ranges from $1.00 per head to $8.00 per boat per day.)	104	108	402
Kent County			
Rock Hall	47	47	217
(Charge, $10.00 per boat per day.)			
St. Mary's County			
Piney Point	15	15	83
Swann Point	13	15	79
St. George's Island	34	34	223
Piney Pt. to upper end of Sheepshead Bar	295	350	1,186
Patuxent River around Pearson	450	450	2,250
(Charge ranges from $1.00 per head per day to $5.00 per boat per day.)	807	864	3,821
Somerset County			
Wenona	4	4	23
Deal's Island	7	7	33
Tangier	36	36	154
Chance	2	2	10
Rumbley	1	1	6
(Charge $8.00 to $12.00 per boat per day.)	50	50	226
Talbot County			
Tilghman and Neavitt	40	40	200
(Charge, $10.00 per trip.)			
Wicomico County			
Waterview	12	12	52
Tyaskin	6	6	30
Nanticoke	8	8	32
Bivalve	4	4	18
Salisbury	1	1	4
Ellicott's Island	1	1	5
(Charge, $7.00 per day per boat.)	32	32	141

	1933	1932	Increase
Total number of trips	2,001	1,670	331
Total number of men employed	2,003		
Total number of persons fishing	11,126	9,735	1,391